

ARITHMETIC APPARATUS AND ARITHMETIC METHODABSTRACT OF THE DISCLOSURE

An arithmetic apparatus and an arithmetic method
5 capable of executing arithmetic by reconfigurable
hardware, shortening a processing time of arithmetic
including conditional branches causing a heavy processing
load and improving a processing speed even when
conditional branches exist in a loop of performing
10 repeating arithmetic processing, wherein arithmetic
processing including conditional branches is divided to
first processing of unconditional branches and second
processing with conditional branches, the first
processing of unconditional branches is assigned to
15 reconfigurable arithmetic means, configuration
information of hardware is generated based on the first
processing, the first processing is executed by the
reconfigured arithmetic means based on the configuration
information, the second processing with conditional
20 branches is assigned to a CPU or other arithmetic means,
the assigned second processing with conditional branches
is executed by the CPU, and a result of the processing is
used for correcting a result of said first processing, so
that a result of arithmetic processing including
25 conditional branches is obtained.